

Currently Pending Claims

1. (Twice amended) A keratinocyte growth factor fragment that exhibits at least a 2-fold increase in mitogenic activity as compared to a mature, recombinant, full-length keratinocyte growth factor, wherein the fragment lacks the first 23 N-terminal amino acid residues of the mature, full-length keratinocyte growth factor but retains the remainder of the molecule.

2. The keratinocyte growth factor fragment as claimed in claim 1, wherein the fragment exhibits a 7-fold increase in mitogenic activity as compared to the mature, recombinant full-length keratinocyte growth factor.

3. The keratinocyte growth factor fragment as claimed in claim 1, wherein the fragment exhibits a 10-fold increase in mitogenic activity as compared to the mature, recombinant full-length keratinocyte growth factor.

4. The keratinocyte growth factor fragment as claimed in claim 1, wherein the fragment exhibits decreased cytotoxicity as compared to the mature, recombinant full-length keratinocyte growth factor.

9. (Twice amended) A therapeutic composition comprising:
(a) a keratinocyte growth factor fragment that exhibits at least a 2-fold increase in mitogenic activity as compared to the mature, recombinant, full-length keratinocyte growth factor, wherein the fragment lacks the first 23 N-terminal amino acid residues of the mature, full-length keratinocyte growth factor but retains the remainder of the molecule, and
(b) a pharmaceutically acceptable carrier.

25. (Amended) An analog of the keratinocyte growth factor fragment as claimed in claim 34, wherein the analog has at least

one conservative substitution selected from the group of substitutions consisting of a substitution of a leucine with an isoleucine or an isoleucine with a leucine, a substitution of a leucine with a valine or a valine with a leucine, a substitution of an aspartic acid with a glutamic acid or a glutamic acid with an aspartic acid and a substitution of a threonine with a serine or a serine with a threonine and further wherein the analog exhibits the biological activity of the keratinocyte growth factor fragment.

27. (Amended) An analog of the keratinocyte growth factor fragment as claimed in claim 34, wherein the analog has at least one cysteine residue substituted by another amino acid and further wherein the analog exhibits the biological activity of the keratinocyte growth factor fragment.

28. The analog as claimed in claim 27, wherein the cysteine residue is replaced with serine or threonine.

29. (Amended) A therapeutic composition comprising:
(a) the keratinocyte growth factor fragment as claimed in claim 34, and
(b) a pharmaceutically acceptable carrier.

30. A therapeutic composition comprising:
(a) the analog as claimed in claim 25, and
(b) a pharmaceutically acceptable carrier.

32. A therapeutic composition comprising:
(a) the analog as claimed in claim 27, and
(b) a pharmaceutically acceptable carrier.

33. A therapeutic composition comprising:
(a) the analog as claimed in claim 28, and
(b) a pharmaceutically acceptable carrier.

34. (New) The keratinocyte growth factor fragment as claimed in claim 1 having the amino acid sequence depicted at amino acid residues 24 to 163, inclusive, of Figure 1.